

THE TYPE LOCALITY OF
SEDUM PUSILLUM MICHX. AND
SENECIO TOMENTOSUS MICHX.

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The type locality of *Sedum pusillum* Michx. is cited in Michaux (1803) as "HAB. in Carolina septentrionali, loco dicto *Flat-rock*.", that of *Senecio tomentosus* Michx. as "HAB. in Carolinae loco dicto *Flat.-Roc*". In the gazetteer of the introduction to the facsimile edition of the Michaux flora, Ewan (1974) identifies "Flat-rock" as near Hendersonville, Henderson County, North Carolina. This Flat Rock is a well-known resort village of the North Carolina mountains but it is really not the type locality of these two species. Neither occurs in the Appalachian highlands. *Sedum pusillum* is an endemic of piedmont granite outcrops of South Carolina with one station in adjacent North Carolina. *Senecio tomentosus*, while mainly a species of the southeast United States coastal plain, also occurs on piedmont rocks in South Carolina and Georgia. The true type locality of these species is another Flat Rock, in northern Kershaw County, South Carolina, not a community but a huge granite outcrop, now a quarry producing a beautiful monument stone highly esteemed in the industry. It is crossed by State Road 58, "Flat Rock Road", 8.3 miles south of Heath Springs, Lancaster County, South Carolina (one-half mile south of the north Kershaw County boundary). It is marked on the Kershaw County road map and on the Camden quadrangle topographic map. Highway 58 is the original main road between Camden and Lancaster, frequently travelled in colonial and early republican days, known then as "The Catawba Path". Flat Rock and its neighboring crag to the north, Hanging Rock, were landmarks on this road. Michaux travelled this road often en route between his headquarters in Charleston and regions in the mountains and further. Early geography of this region of South Carolina was gleaned from Hooker (1953), while Michaux's routes were extracted from his journals as published by Sargent (1889).

There is no evidence in his journals that Michaux ever passed through Flat Rock, North Carolina, but there are two entries which indicate he passed the Flat Rock of South Carolina. On 23 April 1795, he passed "par Flat rock, par Hanging rock Creek et couché à

Cane Creek, Lancaster County . . .". He passed early in the day, and there are no botanical notes for this date. On 6 April 1796, en route from Illinois to Charleston, Michaux passed the night near Hanging Rock and on 7 April he proceeded to Camden, collecting a little along the way. On this route he would have to pass Flat Rock. I believe he obtained the specimens of *Sedum pusillum* and *Senecio tomentosus* on this leg of his journey. The label of the specimen of *Sedum pusillum* flatly states "Flat rock" in Michaux's hand. The plants are in prime anthesis, as they would be on 7 April. The label of *Senecio tomentosus* says "Sur un Rocher, Flat roc or hanging roc". The languages are mixed. The specimen is mostly in bud; only a few of the lower heads have expanded rays. It is in a state of pre-anthesis as would be expected on that date. Thus it is believed that 7 April 1796 is the date of collection of both type specimens. Both are in p and were seen as photographs in the IDC Microfiche set 6211.

It is generally accepted that Michaux, while given full credit for the *Flora boreali-americana*, did not write it. L. C. M. Richard is generally believed to be the anonymous author (Stafleu and Cowan, 1981). The variation in stated habitat between written label and printed citation in this case is not the only one in the Michaux flora.

Kershaw, the type locality county of *Senecio tomentosus*, is not dotted on the map for this species in Radford, Ahles, and Bell (1968). A dot should also be placed on the map for Pickens County as the species was collected from Table Rock by Buckley in 1843-44 (GH). These are two resumed counties of record for South Carolina for this species, recently overlooked.

On 19 and 20 April 1982 I visited the Flat Rock of South Carolina and two other granite bosses of that state long popular with field botanists. I did not find either type species discussed in this paper at Flat Rock. The extensive quarrying seems to have eradicated them as well as most of the other vegetation. I doubt if topotypes will ever be found. Outside the quarried area I did collect a specimen of *Senecio anonymus* Wood heavily suffused with the lanate tomentum usually associated with *S. tomentosus*. It might be a persistent introgressant, suggesting *S. tomentosus* had been here. Hybridization between these species occasionally occurs on the granites of South Carolina and Georgia.

The other bosses visited were 40-Acre Rock, in Lancaster County, and the huge one at the base of Caesar's Head, in Greenville County. The endemic flora and other plants of the vernal pools and mossy pockets of these bosses are seriously endangered by heavy human pressure. The habitat is very fragile. I suppose this is true of other large outcrops I was not able to visit. It is hoped efforts will be made to preserve some of these unique areas and their threatened floral elements.

ACKNOWLEDGMENTS

The author wishes to thank the foreman of the Flat Rock Quarry for permission to explore the property, for useful local geographical information and for his personal botanical observations. The curators of GH and MO are thanked for the loan of specimens used in this study. Financial assistance was received gratefully from the Virginia Flora Committee.

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